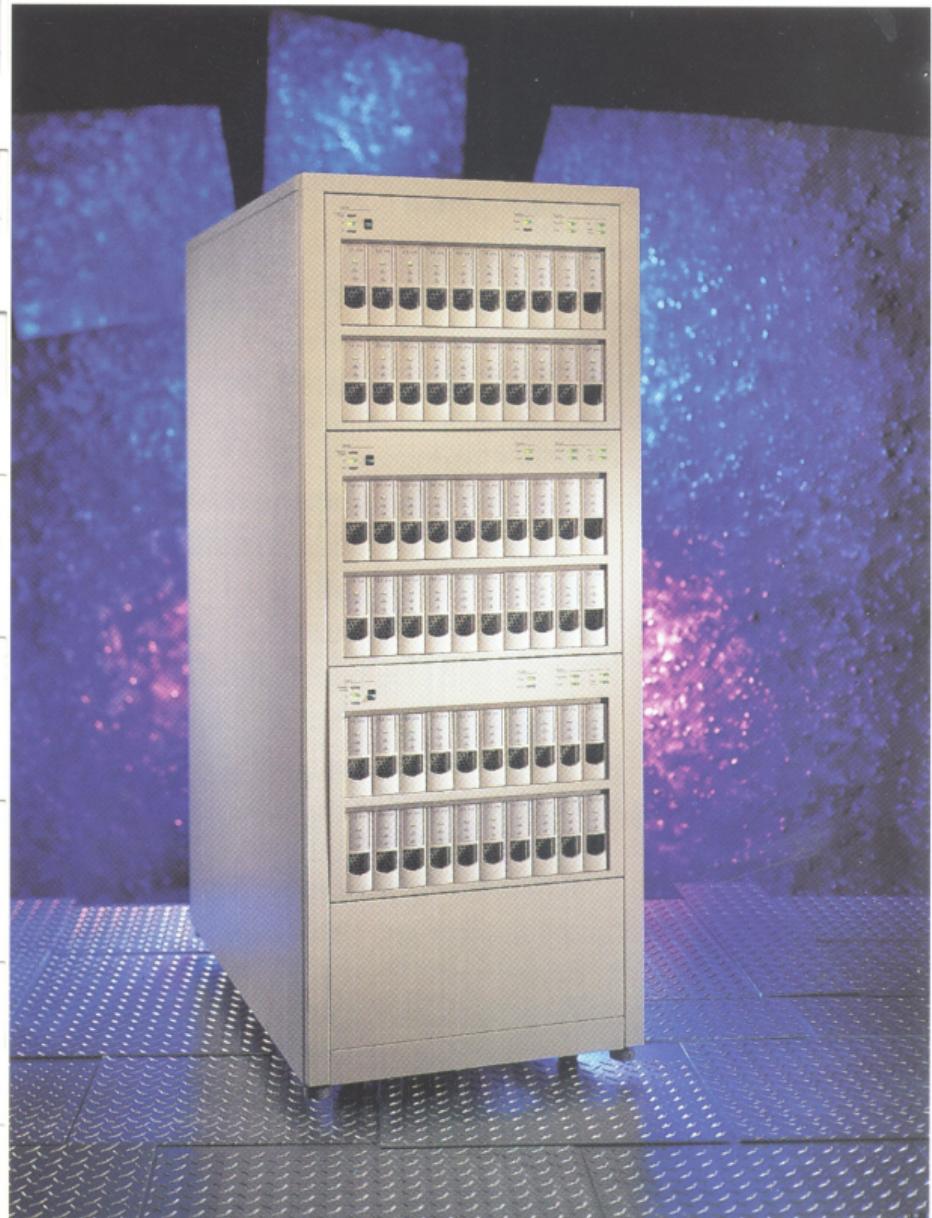




# Disk Array Subsystem Pocket Guide



# What's Inside

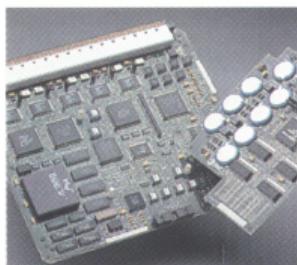
## The Possibilities Are Endless.

The new AT&T Series 3 RAID Subsystem family sets the standard for next-generation RAID technology. In addition to the significant performance enhancements cache memory provides, this newly architected series of controllers offers amazing upgrade flexibility.

The Series 3 family is designed around the PCI bus, which has enabled us to build in future I/O connection capabilities. A key objective with this new subsystem family is to facilitate the transition to rapidly evolving new I/O protocols, including the emerging serial standards.

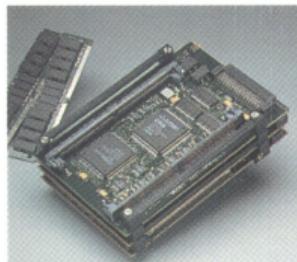
## A Remarkable Performance.

AT&T RAID Subsystems deliver a variety of high-performance caching solutions. End users are ever on the lookout for faster and faster means of accessing data without compromising data integrity. Which is exactly what the architecture of the Series 3 RAID Subsystems makes possible. And with the battery backup option, the cache feature provides high fault tolerance.



### 6299 Controller.

The 3601 RAID controller uses a 486 microprocessor, caching architecture, and an on-board Peripheral Component Interconnect (PCI) bus for higher performance and higher DMA bandwidth.



### 6210 Controller.

The 3201 RAID controller uses a 486 microprocessor. The first controller on the market in a 3.5" drive form factor, it uses standard SCSI connectors. Designed to deliver superior RAID performance to price-sensitive customers in PC LAN and UNIX environments.

# 6256 Subsystem



The Series 3 RAID Subsystem 6256 is designed to provide higher availability, higher performance, ease of service and high storage capacity. Redundant fan and power supplies are standard. Fans, power supplies, disk array controllers and disk drives are all hot-swappable and customer replaceable. An integrated UPS for battery backup is an option. One to three 6299 modules can be mounted in the 56" high standard width EIA rack-mount cabinet.

## RAID SUPPORT

- 0 - Data Striping
- 1 - Mirroring
- 3 - Parallel transfer for high bandwidth
- 5 - Independent actuators with parity striped across drives

## CONFIGURATION/MONITORING

- Host O/S-Dependent RAID Manager Software (Via SCSI):
  - UNIX MP-RAS
  - Windows NT™
- Host O/S-Independent RAID Manager For DOS Software (Via RS232 or SCSI):

## SERVICEABILITY

- Hot-Swap Component Canisters Replaceable On-line By Customer:
  - Drives, Controllers, Power Supplies, and Fans/Fan Control Boards
- Other Components Replaceable Off-line By Trained Service Person:
  - Backpanels, Drive Terminators, Cables, AC Distribution, Display Board, and Status/ID Board

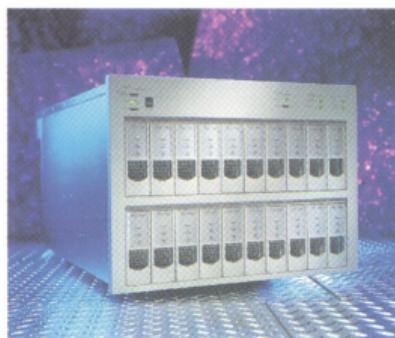
## CONTROLLERS

- One or two hot-swappable controllers in each module
- Supports one differential 8/16-bit fast SCSI-2 host channel
- Supports five single-ended 8-bit fast SCSI-2 disk drive channels
- I/O cache options available

## DRIVES

- Both 2.1 GB and 4.2 GB 7200 rpm drives available
- Up to 252 GB of storage in a single cabinet
- Drive SCSI ID automatically set upon drive insertion

# 6299 Subsystem



The Series 3 RAID Subsystems 6299 and 6299 Desk-Side are designed to provide ease of integration, installation and service. We minimized the number of cables in the drive data path, placed all major components in customer-replaceable

canisters, and optimized the packaging to offer a standard width EIA rack-mount (6299 module) cabinet or a desk-side (6299DS) cabinet.

## RAID SUPPORT

- 0 - Data Striping
- 1 - Mirroring
- 3 - Parallel transfer for high bandwidth
- 5 - Independent actuators with parity striped across drives

## CONFIGURATION/MONITORING

- Host O/S-Dependent RAID Manager Software (Via SCSI):
  - UNIX MP-RAS
  - Windows NT™
- Host O/S-Independent RAID Manager For DOS Software (Via RS232 or SCSI):

## SERVICEABILITY

- Hot-Swap Component Canisters Replaceable On-line By Customer:
  - Drives, Controllers, Power Supplies, and Fans/Fan Control Boards
- Other Components Replaceable Off-line By Trained Service Person:
  - Backpanels, Drive Terminators, Cables, AC Distribution, Display Board, and Status/ID Board

## CONTROLLERS

- One or two hot-swappable controllers in each module
- Supports one differential 8/16-bit fast SCSI-2 host channel
- Supports five single-ended 8-bit fast SCSI-2 disk drive channels
- I/O cache options available

## DRIVES

- Both 2.1 GB and 4.2 GB 7200 rpm drives available
- Up to 84 GB per subsystem
- Drive SCSI ID automatically set upon drive insertion

# 6210 Subsystem



The AT&T 6210 RAID Subsystem is available in either a desk-side model (6210DS) or rack-mount configuration (6210RM). The highly-customizable RAID Subsystem provides up to ten disk drives and offers many options including redundant power supply and tape back-up. The many options available make the 6210 an exceptional, cost-effective RAID subsystem.

## RAID SUPPORT

- 0 - Data Striping
- 1 - Mirroring
- 3 - Parallel transfer for high bandwidth
- 5 - Independent actuators with parity striped across drives

## CONFIGURATION/MONITORING

- Host O/S-Dependent RAID Manager Software (Via SCSI):
  - UNIX MP-RAS
  - Windows NT<sup>TM</sup>
- Host O/S-Independent RAID Manager For DOS Software (Via RS232 or SCSI)

## SERVICEABILITY

- Hot-Swap Component Canisters Replaceable On-line By Customer:
  - Drives
  - Redundant Power Supply Option
- Customer Replaceable Tape Option

## CONTROLLER

- Supports one 8/16-bit fast SCSI-2 host channel (single-ended or differential)
- Supports two single-ended, 8/16-bit fast SCSI-2 disk drive channels
- I/O cache options for up to 64 MB

## DRIVES

- 2.1 GB or 4.2 GB 7200 rpm, 16-bit
- Up to 42 GB in each cabinet
- Drive SCSI ID automatically set upon drive insertion

## Subsystem

## RAID/NON-RAID CAPACITY RANGE DRIVE SELECTION

6210

**6299**

**6256**

RAID/NON-RAID	RAID
CAPACITY RANGE	Up to 252 GB
DRIVE SELECTION	Up to 42 GB
2.1 DISK	Either
4.2 DISK	Up to 84 GB
TAPE	Up to 84 GB
CUSTOME REPLACEABLE UNITS	
DISKS	Up to 84 GB
POWER	Up to 84 GB
FANS	Up to 84 GB
CONTROLLER	Up to 84 GB
THE BATTERY BACK-UP OPTION	Up to 84 GB
ROLLER I/O CACHE OPTIONS	Up to 84 GB
RACK-MOUNT	Up to 84 GB
DESK SIDE, FLOOR STANDING	Up to 84 GB
UPS OPTION IN CABINET	Up to 84 GB
DUAL CONTROLLER OPTION	Up to 84 GB
RAID SUPPORT	Up to 84 GB
0, 1, 3, 5	Up to 84 GB

AT&T's implementation of RAID 1 supports striping and mirroring, "RAID 10"